

REMARKS/ARGUMENTS

Description of amendments

In the specification, amendments have been made to correct typographic errors as suggested by the Examiner.

Claims 1, 2, 5, 6, and 9-12 are now pending and under examination. Applicant has amended claims 1, 2, 5, and 6 to delete reference numerals, and added new claims 9-12. No new matter has been added.

Interview summary

Applicant's counsel greatly appreciates the courtesy extended by Examiner Lavarias during the course of an interview conducted on January 28, 2004.

In the interview, the Examiner and Applicant's counsel discussed the differences between the optical waveguide (the optical fiber bundle) of the claimed invention and the light mixing means of the Tsuji patent. Also discussed were the differences between the coordinate measuring instrument of claims 5 and 6 and the Suzuki patent.

Objections to the specification

Applicant very much appreciates that the Examiner pointed out two typographic errors in the specification. As suggested by the Examiner, Applicant has amended the specification to correct the typographic errors.

Rejections under 35 U.S.C. §102

Claims 1 and 2 were rejected under 35 U.S.C. §102(b) as being anticipated by Tsuji (U.S. Patent 6,285,855). After the interview, Applicant's counsel reported the results of the interview to Applicant, and Applicant provided his counsel with additional information regarding the differences between the optical waveguide (the optical fiber bundle) of the claimed invention and the light mixing means of the Tsuji patent. Applicant respectfully requests reconsideration and withdrawal of the rejection in light of the new information, which is set forth below.

The light mixing means of Tsuji is an inside reflection type integrator with which light mixing takes place at its light exit surface. The optical waveguide (the optical fiber bundle) of the claimed invention does not integrate the guided light at its light exit surface (see specification at page 4, lines 16-20). On the contrary, the light at the light exit surface of the optical waveguide is very much inhomogeneous. As a proof, Applicant has attached a photograph of the exit surface of the optical fiber bundle (Exhibit 1) which was taken with a digital camera. The photograph clearly shows light spots of different brightness, each of which corresponds to the end of a single optical fiber of the optical waveguide.

Also attached is a drawing (Exhibit 2) provided by Applicant, which demonstrates the differences between the optical waveguide of the claimed invention and the optical pipes of the Tsuji. The drawing shows that at the light exit surface of Tsuji's optical pipes there is a homogeneous light distribution. The drawing also shows that at the light exit surface of the optical waveguide of the claimed invention there is an inhomogeneous light distribution (i.e. a Gaussian light distribution).

In view of the above discussion, Applicant respectfully requests reconsideration and withdrawal of the rejection.

As stated in the Interview Summary, new claims 9 and 10, which specify that only the homogenizing optical system performs the function of homogenizing the light, are patentable over Tsuji.

Claims 5 and 6 were rejected under 35 U.S.C. §102(b) as being anticipated by Suzuki (U.S. Patent 5,608,575). As discussed in the interview, the image projection device of Suzuki is not a coordinate measuring instrument, does not homogenize the light, and does not measure the position of a feature (sensors 47, 48 do not measure a position signal). Accordingly, claims 5 and 6 are not anticipated by Suzuki. Claims 11 and 12 are also patentable over Suzuki because they depend from claims 5 and 6.

In light of the foregoing remarks, this application is considered to be in condition for allowance, and early passage of this case to issue is respectfully requested. If there are any questions regarding this amendment or the application in general, a telephone call to the

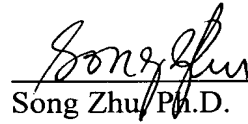
Application No. 09/893,998
Reply dated February 2, 2004
Response to Office Action dated August 1, 2003

undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (CAM # 038664.49970US).

February 2, 2004

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Song Zhu", is written over a horizontal line.

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Exhibit 1

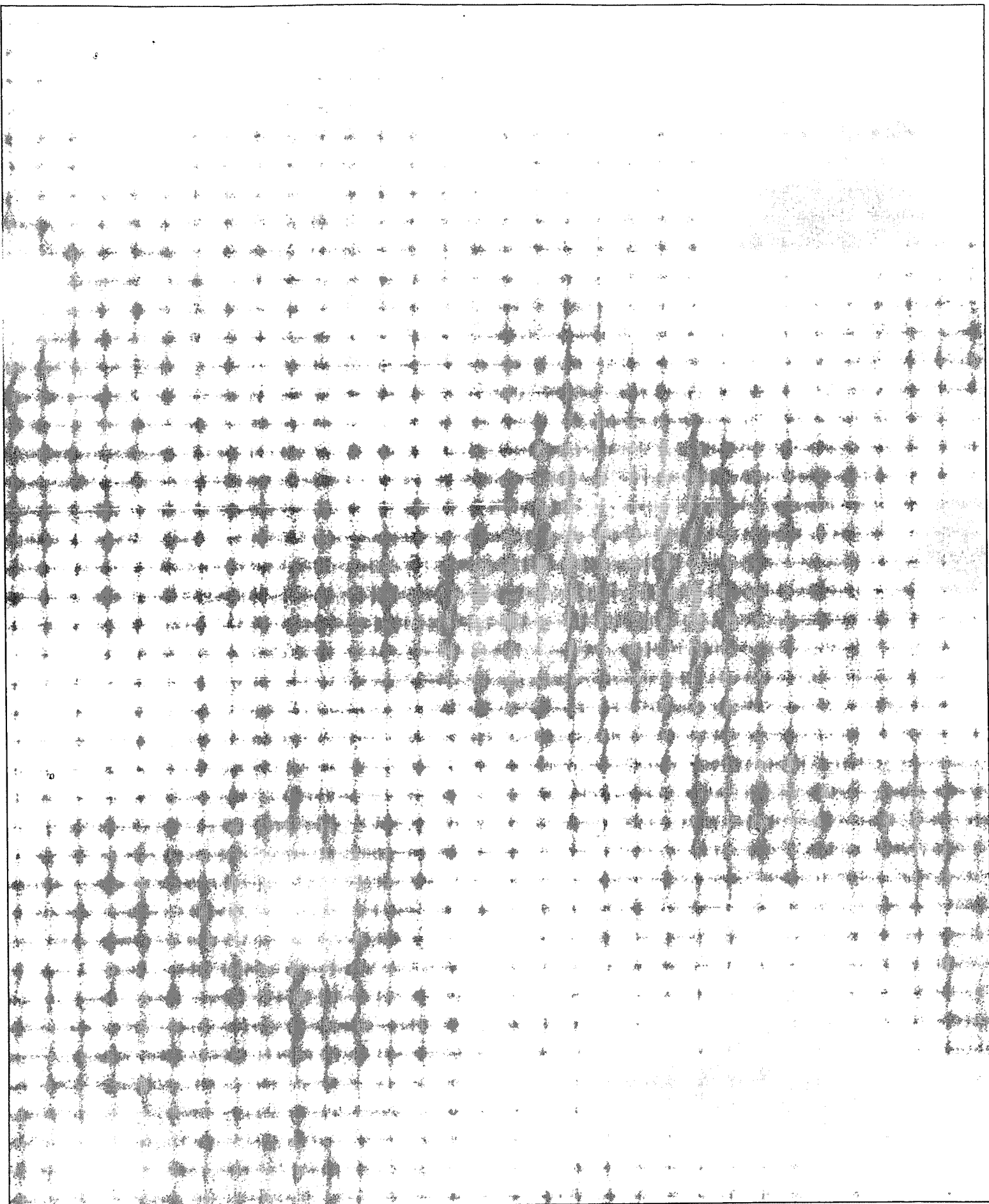
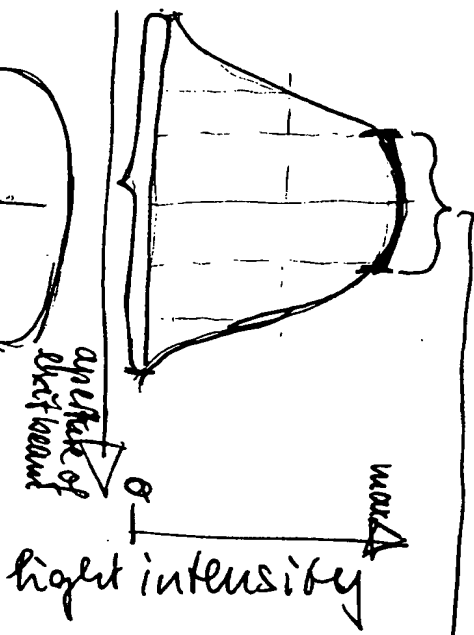


Exhibit 2



→ this "part" of the beam is coupled out by the coupling-out optical system (5), see Figure 1 of parent application!

